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# Tinuvin® XT 100

## High performance light stabilizer system

### Characterization

Tinuvin XT 100 is a novel, high performance light stabilizer system based on high molecular weight hindered amine NOR™ light stabilizer.

It is a cost effective UV/thermal stabilizer for mid-pesticide-resistant agricultural film applications, such as greenhouse and mulch films.

### Chemical name

Hindered amine light stabilizer

### Applications

Agriculture films.

### Features/benefits

Tinuvin XT 100 is a cost effective light stabilizers designed to provide stabilization to agriculture films for a longer lifetime. It shows a good performance even in presence of agro-chemicals such as pesticides, insecticides or soil disinfections.

### Product forms

Code: Tinuvin XT 100 FF  
Appearance: white to off-white granules

### Guidelines for use

UV stabilization of greenhouse films 0.2–2%  
UV stabilization of mulch films 0.2–2%

### Physical properties

Melting range softening range 90–120 °C  
Density (20 °C) 1.05 g/cm<sup>3</sup>  
Bulk density 0.507 g/ml

### Solubility (20–25 °C) % w/w

Dichloromethane	48
Tetrahydrofurane	48
Water	< 1
n-Octanol	3
Isopropanol	2

### Volatility

Weight Loss (% w/w)	
0.3	
0.4	
0.6	
1.4	

**Pure substance; TGA;**  
**heating rate 10 °C/min in air**  
Temperature (°C)

200
230
250
280

**Handling & Safety**

Tinuvin XT 100 requires no special safety measures, provided the usual precautions for handling chemicals are observed. Avoid dust formation and ignition sources.

For more detailed information please refer to the material safety data sheet.

**Important notes**

1. Use of Tinuvin XT 100 light stabilizer in combination with flame retardants may constitute infringement of Australian Patent No. 735643 or/and US Patent No. 5,393,812 and of any existing equivalent patents or any patents granted on equivalent patent applications in other countries.
2. Please be aware that the presence of BHT antioxidant in plastic articles containing Tinuvin XT 100 can give rise to discoloration if the article is stored in absence of light. This effect normally disappears upon UV exposure without significantly affecting the light stabilization properties of Tinuvin XT 100. Antioxidants like Irganox<sup>®</sup> 1010 and Irganox 1076 do not give rise to such effect in normal conditions.

**Note**

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